

## AMENDMENTS

### *In the Claims:*

Please amend the claims as indicated hereafter.

1. (Currently Amended) A system for automatically cropping graphical images, comprising:

memory for storing digital data that defines a graphical image captured by said system;

an object detector configured to perform a search of said digital data for an object of a particular type and to automatically identify, based on said search, a portion of said digital data that defines an image of an object of said particular type within said graphical image; and

an image cropper configured to automatically perform a cropping operation on said ~~digital data~~ graphical image based on a position of said object image within said graphical image, said image cropper configured to determine said position of said object image within said graphical image based on said portion automatically identified by said object detector, wherein said cropping operation performed on said graphical image is not based on any other graphical image captured by said system.

2. (Previously Presented) The system of claim 1, wherein said object image is an image of a person's face, and wherein said object detector is configured to search said digital data for facial images.

3. (Currently Amended) The system of claim 1, wherein said ~~image cropper is~~ configured to crop said digital data cropping operation is based on a size of said object image.

4. (Currently Amended) The system of claim 1, wherein said ~~image cropper is configured to crop said digital data~~ cropping operation is based on said position of said object image such that said object image is substantially centered between two edges of said graphical image.

5. (Currently Amended) A system for automatically cropping graphical images, comprising:

memory for storing digital data that defines a graphical image;

an object detector configured to analyze said digital data and to automatically identify a graphical object within said graphical image; and

an image cropper configured to automatically identify, based on a position of said graphical object within said graphical image, said graphical object as an object to be removed from said graphical image and to automatically crop said digital data based on said determination ~~a position of said graphical object within said graphical image~~ such that said graphical object is removed from said graphical image.

6. (Original) The system of claim 1, further comprising:

an input device for receiving an input from a user; and

a system manager configured to enable said image cropper based on said user input.

7. (Original) The system of claim 1, further comprising an image capturing device configured to receive an image of a scene and to produce said digital data based on said image received by said image capturing device.

8. (Original) The system of claim 7, wherein said image capturing device includes a lens for receiving said image of said scene and an image converter for producing said digital data based on said image of said scene.

9. (Currently Amended) A system for automatically cropping graphical images, comprising:

means for capturing graphical images;

memory for storing digital data that defines a graphical image captured by said capturing means;

means for performing a search of said digital data for an object of a particular type and for automatically identifying, based on said search, a portion of said digital data that defines an image of an object of said particular type within said graphical image; and

means for automatically cropping said ~~digital data~~ graphical image by performing a cropping operation based on a position of said object image within said graphical image, said cropping means configured to determine said position of said object image within said graphical image based on said portion automatically identified by said identifying means, wherein said cropping operation is not based on any other graphical image captured by said capturing means.

10. (Previously Presented) The system of claim 9, wherein said object image is an image of a person's face, and wherein said identifying means is configured to search said digital data for facial images.

11. (Currently Amended) The system of claim 9, wherein said cropping ~~means is~~  
~~configured to crop said digital data~~ operation is based on a size of said object image.

12. (Currently Amended) The system of claim 9, wherein said cropping ~~means crops~~  
~~said digital data~~ operation is based on said position of said object image such that said object  
image is substantially centered between two edges of said graphical image.

13. (Currently Amended) The system of claim 9, wherein said cropping operation is  
~~means crops said digital data~~ based on said position of said object image such that said object  
image is completely removed from said graphical image.

14. (Original) The system of claim 9, further comprising:  
means for receiving an input from a user; and  
means for enabling said cropping means based on said user input.

15. (Original) The system of claim 9, further comprising a means for receiving an  
image of a scene and for producing said digital data based on said image received by said  
receiving means.

16. (Currently Amended) A method for automatically cropping graphical images, comprising the steps of:

capturing a graphical image;

storing digital data that defines a said graphical image;

automatically searching said digital data for an object of a particular type;

identifying, based on said searching step, a portion of said digital data that defines an image of an object of said particular type;

determining, based on said identified portion, a position of said object image within said graphical image; and

automatically cropping said ~~digital data~~ graphical image based on said position of said object image, wherein said cropping step is not based on any captured image other than said graphical image.

17. (Previously Presented) The method of claim 16, wherein said object image comprises an image of a person's face.

18. (Original) The method of claim 16, wherein said cropping step is further based on a size of said object image.

19. (Original) The method of claim 16, further comprising the step of:  
substantially centering said object image between two edges of said graphical image via said cropping step.

20. (Previously Presented) The method of claim 16, further comprising the step of:  
removing, via said cropping step, said object image from said graphical image.

21. (Original) The method of claim 16, wherein said searching and cropping steps are  
automatically performed in response to said storing step.

22. (Original) The method of claim 16, further comprising the steps of:  
receiving an input from a user; and  
enabling said cropping step based on said user input.

23. (Previously Presented) The system of claim 1, wherein said object detector is  
configured to make a determination as to whether said portion defines a facial image.

24. (Currently Amended) The system of claim 1, wherein said image cropper is  
configured to automatically crop said ~~digital data~~ graphical image such that said object image is  
removed from said graphical image.

25. (Previously Presented) The system of claim 24, wherein said object image  
comprises an image of a face.

26. (Previously Presented) The system of claim 5, wherein said graphical object is an  
image of a face.

27. (Previously Presented) The method of claim 16, further comprising the step of enabling a user to select the type of automatic cropping to be performed in said cropping step.

28. (Previously Presented) The method of claim 16, further comprising the step of making a determination as to whether said object image is a facial image, wherein said cropping step is based on said determination.

29. (Previously Presented) The method of claim 28, wherein said cropping step comprises the step of removing said object image from said graphical image if said determination indicates that said object image is a facial image.

30. (Currently Amended) A system for automatically cropping graphical images, comprising:

an image capturing device configured to capture graphical images;

memory for storing digital data that defines a graphical image captured by said image capturing device;

an object detector configured to make a determination as to whether a portion of said digital data defines a facial image; and

an image cropper configured to automatically perform a cropping operation on said digital data graphical image based on said determination, wherein said cropping operation is not based on any image captured by said image capturing device other than said graphical image.

31. (Currently Amended) The system of claim 30, wherein said image cropper is configured to ~~automatically crop said digital data~~, perform said cropping operation, if said portion defines said facial image, based on a position of said facial image within said graphical image.

32. (Currently Amended) The system of claim 30, wherein said image cropper is configured to ~~automatically crop said digital data~~ perform said cropping operation such that said facial image is removed from said graphical image.

33. (Currently Amended) A method for automatically cropping graphical images, comprising the steps of:

storing digital data that defines a graphical image;

~~determining whether a portion of said digital data defines a facial image; and~~

detecting a plurality of faces within said graphical image;

automatically identifying at least one of said faces as an object of interest based on a position of said at least one facial image; and

automatically cropping said ~~digital data~~ graphical image based on said ~~determining~~ selecting step such that said at least one face is substantially centered within said graphical image.

34. (Cancelled)



35. (Currently Amended) The method of claim 33, wherein said cropping step comprises the step of ~~removing said facial image~~ removing, from said graphical image, at least one of said faces that is not selected in said selecting step.

36. (Currently Amended) A method for cropping a graphical image, comprising the steps of:

detecting a plurality of faces in the graphical image;

automatically cropping the graphical image; and

determining if one of the faces is close to a center of the graphical ~~image; and image~~  
prior to said cropping step,

wherein said cropping step is based on said determining step.

~~automatically cropping the graphical image.~~

37. (Previously Presented) The method of claim 36, further comprising the step of determining a location in the graphical image of each of the plurality of faces.

38. (Previously Presented) The method of claim 36, wherein the step of cropping the graphical image comprises positioning one of the plurality of faces closer to the center.

39. (Previously Presented) The method of claim 36, wherein if one face of the plurality of faces is close to the center, then cropping the graphical image to move the one face closer to the center.

40. (Previously Presented) The method of claim 36, wherein if one face of the plurality of faces is close to the center, then cropping the graphical image to remove at least one other face of the plurality of faces.

41-43. (Cancelled)

44. (Currently Amended) ~~The method of claim 41,~~ A method for cropping a graphical image, comprising the steps of:  
detecting a face in a digital image of a picture; and  
automatically cropping the digital image based on a size of the face relative to the digital  
D1 image.

wherein the automatically cropping further comprises the step of moving the face away from a center of the picture.

45. (Cancelled)

46. (New) The system of claim 5, wherein said image cropper is configured to automatically identify said graphical object as an object to be removed based on a whether said graphical object is close to an edge of said graphical window.

47. (New) A system for automatically cropping graphical images, comprising:  
memory for storing digital data that defines a graphical image;  
an object detector configured to detect a plurality of objects of a particular type within said graphical image based on a position of said at least one object; and  
an image cropper configured to automatically identify at least one of said detected objects as an object of interest based on a position of said at least one detected object within said graphical image and to crop said graphical image such that said at least one object is substantially centered within said graphical image.

48. (New) The system of claim 47, wherein said objects of a particular type are facial images, and wherein said object detector is configured to search said graphical image for facial images to detect said objects of said particular type.

49. (New) The system of claim 47, wherein said image cropper is configured to automatically remove at least one of said detected objects that is not identified as an object of interest by said image cropper.

50. (New) The system of claim 47, wherein said image cropper is configured to identify said at least one object as an object of interest based on whether said at least one object is close to a center of said graphical image.

51. (New) A method for automatically cropping graphical images, comprising:  
detecting an object within said graphical image;  
determining that said object is close to an edge of said graphical image; and  
automatically removing said object from said graphical image based on said  
determining.

52. (New) The method of claim 51, wherein said object is a face and said method  
further comprises searching said graphical image for facial images.

53. (New) The method of claim 51, further comprising displaying said graphical image.

54. (New) A method for cropping a graphical image, comprising:  
detecting a face in a digital image of a picture; and  
automatically cropping the digital image based on a position of the face within the  
digital image,  
wherein the automatically cropping further comprises moving the face away from a  
center of the picture.

55. (New) The method of claim 33, wherein said automatically identifying is based on  
whether said at least one face is close to a center of said graphical image.

---